

# *From Recession to Recovery*



**BILL LOCKYER**  
*California State Treasurer*





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Fellow Californians:

The 2014 Debt Affordability Report (DAR) is the last of my tenure as State Treasurer. We and our state have been through a lot together the past eight years. The 2007-09 recession was California's most devastating economic downturn since the Great Depression. It wrecked our housing market, destroyed billions of dollars in personal wealth for Californians at every economic level and annihilated more than 1.3 million California jobs. It destabilized the finances of local governments. And it left State government confronting its worst fiscal crisis in generations.

Initially, we didn't fully understand the depth of the crisis and underestimated how long it would last. As a result, we didn't handle it well. Accounting and budget gimmicks seemed to be the order of the day – one-time solutions (often illusory), deferred payments, incurring long-term debt to cover current operating expenses. Policymakers kept putting off the reckoning, and the hole kept getting deeper. Three years ago, the State still faced years of projected multi-billion dollar budget deficits.

But in 2011, the Governor and Legislature found their fiscal bearings. Ever since, the State has been moving rapidly in a positive direction. Projected deficits have turned to surpluses. We're on track to completely pay off in four years the accumulated debt caused by a decade of budget gimmicks, which had grown to \$34.7 billion. Policymakers made deep, painful and ongoing spending cuts, and addressed troublesome long-term financial obligations. They enacted reforms to control public employee pension costs and rescue the teachers' retirement system from an unfunded liability problem that threatened its existence.

Voters deserve much of the credit for the State's improved fiscal health. In 2010, they adopted Proposition 25, which lowered the threshold for legislative approval of the budget from two-thirds to simple majority. That ended the days when a handful of lawmakers could cause long impasses. The result has been four straight on-time and honestly balanced budgets adopted before the June 30 constitutional deadline. Then, in 2012, voters decided to help the State by increasing their personal income taxes and the sales taxes they pay when they go to the store. This November, voters will have an opportunity to vote for a measure aimed at building a stronger rainy day reserve. Its adoption would further improve the State's management of taxpayer dollars.

Wiser debt management also has helped return California to an even keel. The state has slowed issuance of new debt and made more efficient use of bond proceeds already in hand. We've also aggressively pursued opportunities to refinance outstanding bonds to reduce debt service costs. Refinancings completed since 2011 will save taxpayers \$1.7 billion on debt service. More evidence the stronger debt management practices have paid dividends: The 2009 DAR estimated debt service payments would consume more than 10.0 percent of State General Fund revenues in FY 2014-15 unless policymakers made tough decisions. They made those choices, and this year's DAR projects that ratio will be 7.2 percent.

All the hard work has strengthened California's standing in the bond market. The State's general obligation (GO) bonds have been upgraded by all three major rating agencies. The premium investors demand to buy California GOs compared to what they pay for higher-rated bonds has declined substantially. In September, the State won a record-low interest rate when it sold \$2.8 billion of cash flow notes.

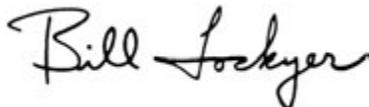
In closing, I'll take the opportunity to make another pitch for a financial management policy change my office has advocated – unsuccessfully so far – since the 2007 DAR. Providing California families and businesses the infrastructure we must build to make possible the future they want, will require a 15-year investment estimated at \$500 billion or more. The question is not whether we make that investment. It's imperative we make it: After all, more than 38 million people live in California today, but we'll have 50 million neighbors by the end of the next decade. The question is how we make the investment affordable.

The State has to be smarter about the way it plans and finances infrastructure development. Our current approach is too *ad hoc*. Voters and the Legislature authorize bonds for particular programs with little thought given to how those bonds fit into a larger infrastructure picture. We need to think longer-term and more strategically. Along those lines, my office has proposed the State develop a 25-year infrastructure master plan that would prioritize projects and provide a financing blueprint. We still think that's a good idea.

Long-term state and local infrastructure financing also should be more fully incorporated into the year-by-year budget process. It should be stacked up against other public services, prioritized relative to those services and funded commensurate with that priority. State, local, Federal and private funding sources need to be considered and carefully coordinated to get the best infrastructure for Californians at the lowest possible cost.

Clearly, the State General Fund cannot bear the entire burden of meeting our infrastructure investment needs. As my office first observed in the 2007 DAR, the State needs to make a more concerted effort to develop financing approaches that relieve the stress on the General Fund. Two examples: more user-pays financing and greater use of revenue bonds to fund transportation projects.

It's been a privilege to serve you as State Treasurer and to lead the outstanding team of state employees who serve California in the State Treasurer's Office, as well as all those dedicated professionals in and outside state government who help us every day with their own good judgment and hard work. We've worked hard together to come through tough times and get a firmer grip on California's future. We all can be proud of what we've accomplished.

A handwritten signature in black ink that reads "Bill Lockyer". The signature is written in a cursive, flowing style.

BILL LOCKYER  
California State Treasurer

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# Preface

Government Code Section 12330 requires the State Treasurer to submit an annual debt affordability report to the Governor and Legislature. The report must provide the following information:

- A listing of authorized but unissued debt the Treasurer intends to sell during the current year (2014-15) and the following year (2015-16), and the projected increase in debt service as a result of those sales.
- A description of the market for State bonds.
- An analysis of State bonds' credit ratings.
- A listing of outstanding debt supported by the General Fund and a schedule of debt service requirements for the debt.
- A listing of authorized but unissued bonds that would be supported by the General Fund.
- Identification of pertinent debt ratios, such as debt service to General Fund revenues, debt to personal income, debt to estimated full value of property and debt per capita.
- A comparison of the pertinent debt ratios for the State with those of the 10 most populous states.
- The percentage of the State's outstanding general obligation (GO) bonds comprised of fixed rate bonds,

variable rate bonds, bonds that have an effective fixed interest rate through a hedging contract and bonds that have an effective variable interest rate through a hedging contract.

- A description of any hedging contract, the outstanding face value, the effective date, the expiration date, the name and ratings of the counterparty, the rate or floating index paid by the counterparty, and an assessment of how the contract met its objectives.

## NOTES ON TERMINOLOGY

- This report frequently uses the words "bonds" and "debt" interchangeably, even when the underlying obligation behind the bonds does not constitute debt subject to limitation under California's constitution. This conforms to the municipal market convention that applies the terms "debt" and "debt service" to a wide variety of instruments, regardless of their precise legal status.
- The report references fiscal years without using the term "fiscal year" or "fiscal." For example, 2014-15 means the 2014-15 fiscal year.
- When referring to the government the word "State" is capitalized. When referring to California, the word "state" is lower-cased.



## SECTION 1:

# *Market for State Bonds*

The State continues to be one of the largest issuers in the \$3.7 trillion U.S. municipal bond market. Following record issuances of \$15.5 billion and \$12.4 billion in 2008-09 and 2009-10, respectively, the State's GO bond issuance has decreased substantially. In 2013-14 (from July 1, 2013 through June 30, 2014), the State issued \$5.9 billion of GO bonds. Of that total, \$2.1 billion refunded already outstanding bonds to produce interest rate savings.

The market and price for the State's bonds are affected by factors specific to the State, as well as overall conditions in capital markets. These factors include the economy, general market interest rates, national and state personal income tax rates, the supply of and demand for municipal bonds, investor perception of the State's credit and the performance of alternative investments, such as stocks or other debt capital. On the whole, municipal interest rates, including those for the State's bonds, are substantially lower than interest rates in the second half of 2013, when the last Debt Affordability Report was published. In addition, with the continued improvement in the State's credit profile, interest rates on the State's bonds relative to those of other municipal issuers continued to improve substantially.

### STATE-SPECIFIC FACTORS

The State's credit profile has been improving significantly since 2012-13. Several factors have contributed to this positive trend:

- The 2014-15 State budget is the fourth consecutive budget adopted on-time, before the June 30 constitutional deadline.
- In recent years, the state has enacted significant structural fiscal reforms. These reforms included a voter-

approved initiative which reinstated the majority vote for annual legislative approval of the State budget and the elimination of redevelopment agencies, which ended the involuntary redirection of tax revenues from schools and local governments and reduced the burden on the State's General Fund to backfill the schools' loss of money. Together, these and other statutory changes have helped rationalize State-local governance and better allocate the State's revenues.

- The temporary personal income tax and sales tax increases approved by voters in November 2012 continue to be in place. The personal income tax increases were approved for seven years commencing in calendar year 2012, the sales tax hike for four years commencing in calendar year 2013.
- The Governor and Legislature have taken steps to eliminate the State's "wall of debt" before these temporary tax increases expire. The "wall of debt" consists of payments still due for budget solutions adopted over the prior decade which, in effect, pushed costs out to future years. These deferred obligations include: a portion of Proposition 98 payments to schools and community colleges; the Economic Recovery Bonds (ERBs) approved by voters in 2004 to pay for prior deficit spending; loans from special funds; unpaid State mandate costs; and various other obligations. At the end of 2010-11, the "wall of debt" totaled \$34.7 billion. By the end of 2013-14, it had been reduced to \$21.6 billion. The Department of Finance (DOF) projects it will be completely retired by the end of 2017-18.
- Ending an era of serial budget deficits and substantial use of one-time measures to balance the budget, the State finished 2012-13 with a surplus of \$254 million,

the first positive year-end balance since 2007-08. The State also posted a strong performance in 2013-14, ending the year with a significantly higher fund balance than budgeted (\$3.9 billion versus \$1.7 billion). In addition, the State's 2014-15 budget projects continued improvement in the State's fiscal condition, with structurally balanced budgets through 2017-18, full repayment of the "wall of debt" by the end of 2017-18 and a substantial \$1.6 billion transfer to the State's rainy day fund in 2014-15.

Because of these developments, as well as other improvements to the State's fiscal management, the State's GO bonds were upgraded by Standard & Poor's (S&P) from A- to A in January 2013, by Fitch Ratings (Fitch) from A- to A in August 2013 and by Moody's Investors Service (Moody's) from A1 to Aa3 in June 2014.

Investors have responded positively to the significant improvements in the State's financial management and performance, and to the rating upgrades. Figure 1 depicts the State's interest rate spreads to the AAA GO Municipal Market Data (MMD) index, the municipal industry's benchmark of AAA-rated state GO bonds. The spread on the State's 30-year bonds to the MMD index tightened from a high of more than 150 basis points at the end of 2009 to 35 basis points this September. The improvement reflects investors' increased confidence in

the State's credit relative to the most highly-rated state-level GO bonds and the reduced supply of the State's bonds offered in the market.

However, despite the significant budgetary improvements over the last few years, the State still faces a number of fiscal challenges and risks. These include paying off its deferred obligations, revenue volatility, the cost of public employee retirement benefits, uncertainty regarding the cost of providing health care under the new Affordable Care Act and expenditure mandates.

## OVERALL MARKET CONDITIONS

The discussion below reviews factors in the larger municipal and taxable bond markets that have significantly affected the market for the State's bonds.

### *Interest Rates*

A defining moment for the municipal market occurred in June 2013, when interest rates rose dramatically. The increase followed the Federal Reserve's announcement that its purchase of U.S. Treasuries and other securities under its quantitative easing (QE) program might be slowed by the end of 2013, and stopped altogether by the middle of 2015, if the economy continued to improve. This an-

**FIGURE 1**

30-YEAR CALIFORNIA MMD CREDIT SPREADS TO "AAA" MMD



Source: Thomson Municipal Market Monitor (TM3)

nouncement prompted municipal bond mutual funds to sell large amounts of assets to maintain liquidity. That, in turn, put significant pressure on underwriting firms' balance sheets. By the end of that month, the market had stabilized but at notably higher interest rates. While interest rates declined between the end of June 2013 and August 2014, the path was not linear, with numerous market events affecting rates.

As shown in Figure 2, from the end of June 2013 to August 2013, the 10- and 30-year tax-exempt MMD indices increased by 38 basis points and 62 basis points, respectively. They subsequently declined by 50 basis points and 41 basis points, respectively, in October 2013, then increased again by 33 basis points and 15 basis points, respectively, in December 2013. From December 2013 through August 2014, the 10- and 30-year MMD indices fell by 70 basis points and 116 basis points, respectively. The 10-year index dropped from 2.77 percent to 2.07 percent, and the 30-year index declined from 4.19 percent to 3.03 percent.

*Current Events That Affected Interest Rates*

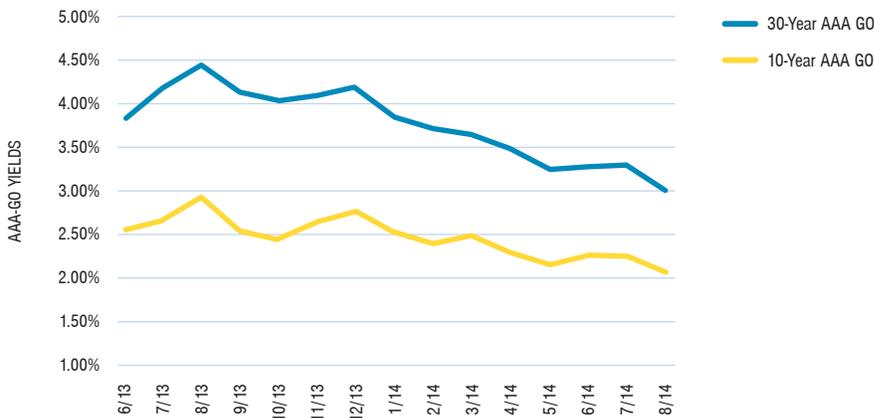
Tax-exempt interest rates in the first half of 2013-14 reacted strongly to market concerns about when and how quickly the QE program would wind down. As economic data turned from good to bad from July through December

2013, the perceived likelihood of rapid QE tapering diminished. The appointment of a new Federal Reserve Chairwoman and the gridlock in Washington over the Federal budget and debt ceiling likewise reduced the chances of QE retrenchment. Additionally, the bankruptcy filing by the City of Detroit on July 19, 2013 sent shockwaves through the municipal market, pushing tax-exempt interest rates higher. (A brief discussion of developments during 2013-14 related to municipal bankruptcies follows.) This rise in tax-exempt interest rates during the first half of 2013-14 would be reversed in time by the changed outlook for QE tapering, the lower primary market supply of municipal bonds and geopolitical events.

Interest rates in the second half of 2013-14 also were affected by economic data. The economic data in the second half generally was weaker not only in the U.S. but also in Europe, China and Japan. The data slowed the expected pace of the QE wind-down and raised the possibility foreign central banks might begin a new round of lowering interest rates. In addition, geopolitical concerns (in particular about Ukraine) were a driving force for lower interest rates. The rise of the separatist movement and Russia's response spurred an investor flight to quality that helped push interest rates down. Interest rates fell further following the downing of a Malaysian Airlines passenger jet in July 2014.

**FIGURE 2**

TRENDS OF TAX-EXEMPT INTEREST RATES



Source: Thomson Municipal Market Monitor (TM3)

### Supply and Demand

Technical factors such as supply and demand affect the pricing of municipal bonds.

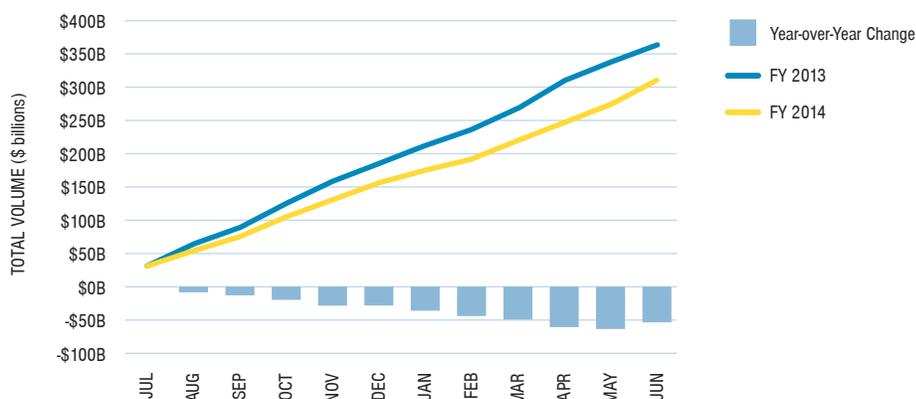
**SUPPLY.** Nationally, primary market issuance volume has been lower on a year-over-year basis. Volume from July 2013 to June 2014 was \$55.0 billion (or 15.2 percent) lower than the same period one year earlier. Over the same period, issuance volume in California also declined, by \$8.5

billion (or 12.6 percent), although most of the decrease came the second half of 2013-14. Figures 3 and 4 present the cumulative volume of national and California municipal bond issuance for 2012-13 and 2013-14.

**DEMAND.** Based on their tax advantaged status, tax-exempt bonds have a more limited universe of investors than taxable bonds. Municipal bond mutual funds represent a significant segment of the investor base for tax-exempt bonds, and cash inflows and outflows for these funds can materially affect de-

**FIGURE 3**

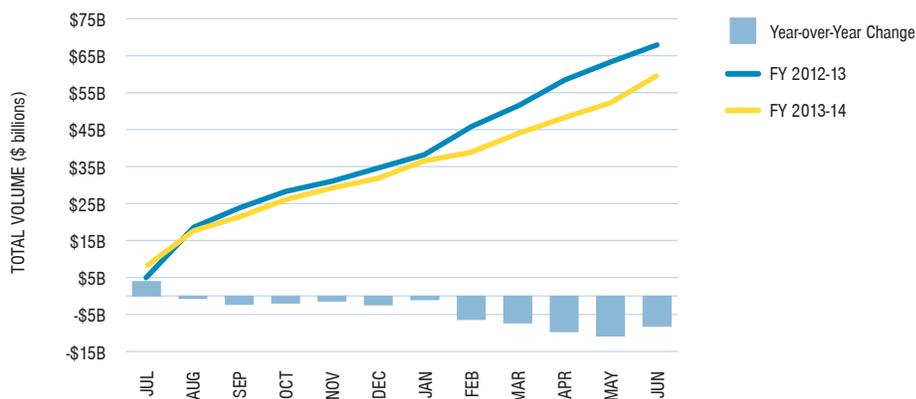
U.S. CUMULATIVE BOND VOLUME, FY 2012-13 AND FY 2013-14



Source: The Bond Buyer

**FIGURE 4**

CALIFORNIA CUMULATIVE BOND VOLUME, FY 2012-13 AND FY 2013-14



Source: CDIAC Database

mand for municipal bonds. As shown in Figure 5, following a period of sustained net cash inflows from late 2011 through February 2013, municipal bond funds steadily lost cash through December 2013. As noted above, based on the Federal Reserve’s remarks on QE, the withdrawals were especially large from June through August 2013. These outflows drove tax-exempt interest rates much higher. Since January 2014, cash flows have reversed course. The funds saw net cash outflows in only four of the first 33 weeks of 2014, and over this period net investor deposits have grown by \$12.0 billion. This increase in assets and institutional investor demand has had a positive effect on the municipal market.

### *Municipal Bankruptcies*

Municipal bankruptcy continues to be closely watched across the country, especially as the magnitude of the impact of actual and threatened bankruptcies or restructurings has grown. Over the last several years, in California, the cities of Mammoth Lakes (2012), San Bernardino (2012), Stockton (2012) and Vallejo (2008) declared a fiscal emergency or filed for Chapter 9 bankruptcy protection. Nationally, a number of local governments, including Central Falls, RI, Jefferson County, AL and Harrisburg, PA filed for bankruptcy. More recently, in July 2013, the City of Detroit became the largest municipality in history to file for bankruptcy, with \$18.0 billion of liabilities. In addition, over the last year, the Commonwealth of Puerto Rico’s bonds fell to non-investment grade, and the government currently is attempting to restructure a portion of its approximately \$70.0 billion of outstanding obligations. All

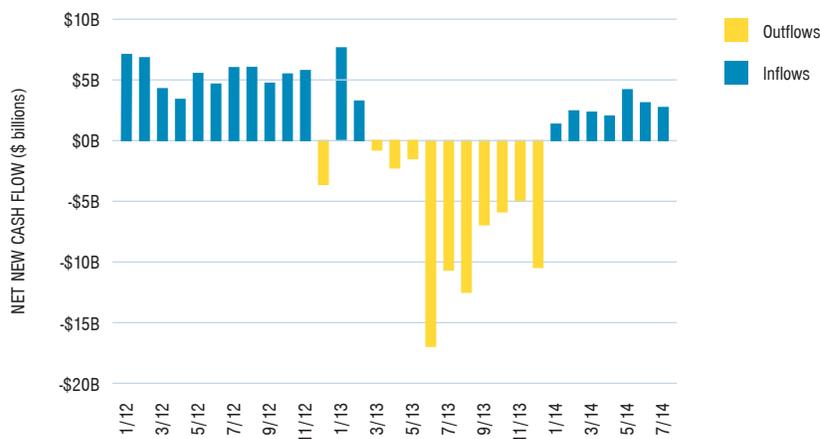
of these municipalities did not make payments on at least some of their debt obligations.

These bankruptcies and fiscal emergencies have placed increased focus on municipal credit fundamentals. For example, significant attention has been paid to distinguishing the various security features of state and local GO bonds across the country. In addition, some bankruptcy recovery plans have highlighted the reality that a bond’s legal protection may be secondary to the government’s underlying ability to meet its obligations. For example, in Detroit, bondholders of both unlimited tax GOs and limited tax GOs are scheduled to take significant “haircuts” if the city’s plan is approved by the court. The bankruptcy process also has raised questions about the different payouts offered to pensioners, bondholders and other creditors, and about balancing debt obligations against public services. As the size of some bankruptcies has grown, questions also have been raised about whether states or the Federal government have any responsibility to bail out troubled local governments.

While some of these situations have been resolved, each solution has been unique, relying on various combinations of mandatory or voluntary reductions of payments to bondholders, pensioners, employees and other creditors. Many important issues remain unresolved. The outcomes of these legal proceedings may set new standards or legal precedents in untested areas of the law.

In spite of these challenges, the municipal market overall is strong. There appears to be significant investor interest in the restructured obligations of these challenged municipalities.

**FIGURE 5**  
MUNICIPAL BOND MARKET, MONTHLY FUND INFLOWS / OUTFLOWS



Source: Investment Company Institute (ICI)

### Interest Rates on the State's Bonds

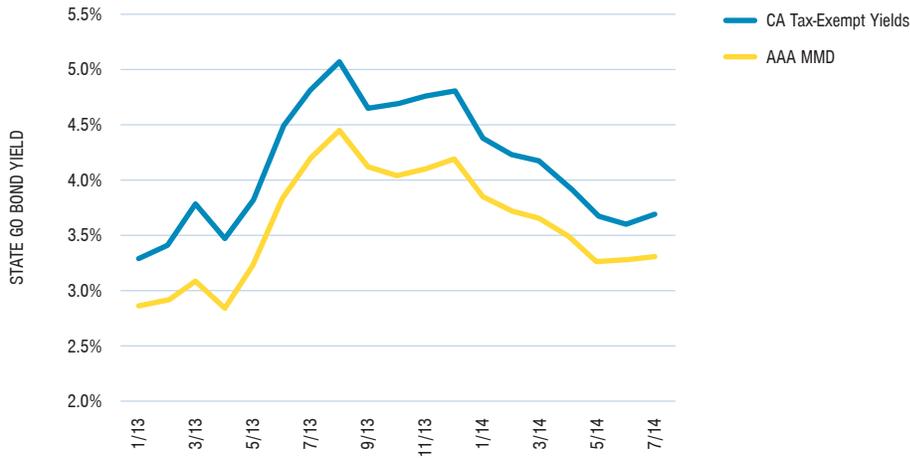
As discussed above, interest rates on the State's bonds are the product of both State-specific factors and overall market conditions. On a State-specific basis, as shown in Figure 6, the continued improvement in California's credit profile and supply factors have combined to narrow the interest rate spread between the State's GO bonds and the MMD index. In addition, since June 2013, as discussed above, tax-exempt interest rates remained high after the run-up that followed the Federal Reserve statements on QE and the Detroit bankruptcy filing. Subsequently, however, rates have declined due to

low issuance supply, a weakening economy and geopolitical concerns. The end result has been a period of great volatility in tax-exempt interest rates. As a result, overall, the State's bonds have followed a similar pattern to the national market (see Figure 6).

While interest rates were higher in the first half of 2013-14, they remained low relative to long-term historical averages. The State took advantage of the low rates in its fall 2013 and spring 2014 GO sales to refund \$2.2 billion of its outstanding bonds to reduce interest costs. These refundings generated for taxpayers \$363.3 million of total debt service savings over the remaining life of the bonds.

**FIGURE 6**

TRENDS OF CALIFORNIA GO BOND YIELDS, 30-YEAR GO BONDS



Source: Thomson Municipal Market Monitor (TM3)

## SECTION 2:

# Snapshot of State's Debt

### OVERVIEW

Figure 7 summarizes the State's long-term debt as of June 30, 2014. This debt includes General Fund-supported GO bonds approved by voters and lease revenue bonds (LRBs) authorized by the Legislature, as well as other special fund and self-liquidating GO bonds. Special fund and self-liquidating GO bonds primarily are secured by specif-

ic revenues, and the General Fund is not expected to pay debt service. However, the General Fund is obligated to pay debt service should the revenues to support repayment not be sufficient. The numbers in Figure 7 include bonds the State has sold (outstanding) and bonds authorized but not yet sold. A detailed list of the State's outstanding bonds, and their debt service requirements, can be found in Appendices A and B.

### FIGURE 7

SUMMARY OF THE STATE'S DEBT (a), AS OF JUNE 30, 2014 (dollars in billions)

GENERAL FUND SUPPORTED ISSUES	OUTSTANDING	AUTHORIZED BUT UNISSUED	TOTAL
General Obligation Bonds	\$75.71	\$25.76	\$101.47
Lease Revenue Bonds (b)	11.27	4.1	15.37
<b>TOTAL GENERAL FUND SUPPORTED ISSUES</b>	<b>\$86.98</b>	<b>\$29.86</b>	<b>\$116.84</b>
<b>SPECIAL FUND/SELF LIQUIDATING ISSUES</b>			
Economic Recovery Bonds (c)	\$4.58	\$ -	\$4.58
Veterans General Obligation Bonds	0.43	0.54	0.97
California Water Resources Development General Obligation Bonds	0.24	0.17	0.41
<b>TOTAL SPECIAL FUND/SELF LIQUIDATING ISSUES</b>	<b>\$5.25</b>	<b>\$0.71</b>	<b>\$5.96</b>
<b>TOTAL</b>	<b>\$92.23</b>	<b>\$30.57</b>	<b>\$122.80</b>

(a) Debt obligations not included in Figure 7: Any short-term obligations such as commercial paper or revenue anticipation notes; revenue bonds issued by State agencies which are repaid from specific revenues outside the General Fund; and "conduit" bonds, such as those issued by State financing authorities on behalf of other governmental or private entities whose obligations secure the bonds.

(b) SB 1407 (2008) authorized an additional amount for construction of certain court projects. The authorized but unissued figure excludes the amount for those projects that has not yet been appropriated by the Legislature.

(c) The State estimates that all outstanding ERBs will be retired by May 2015.

- Approximately 5.0 percent of all GO bonds carry variable interest rates, much lower than the statutorily-authorized maximum of 20.0 percent. The remaining 95.0 percent of the State's GO bonds have fixed interest rates.
- The State has no interest rate hedging contracts on any debt discussed in this report.

## INTENDED ISSUANCE OF GENERAL FUND-BACKED BONDS

The State Treasurer's Office (STO) estimates of intended issuance are based on DOF projections of State departments' funding needs. Projections for new-money debt issuance are based on a variety of factors and are updated periodically. Factors that could affect the amount of issuance include departments' actual spending patterns, re-

vised funding needs, overall budget constraints, use or repayment of commercial paper, general market conditions and other considerations. Actual issuance amounts often vary significantly from initial estimates.

Figure 8 shows the STO's estimated issuance of new-money General Fund-backed bonds over the next two fiscal years. Only currently authorized but unissued GO bonds are reflected in Figure 8. The estimated issuance may increase should new bond programs be approved.

As shown in Figure 8, STO preliminarily estimates the State will issue a combined \$9.55 billion of General Fund-backed bonds in 2014-15 and 2015-16. Using these assumptions for debt issuance, STO estimates debt service payments from the General Fund will increase by \$65.0 million in 2014-15 and \$392.0 million in 2015-16.<sup>1</sup> A detailed list of the estimated debt service requirements can be found in Appendix B.

### FIGURE 8

INTENDED ISSUANCE, GENERAL FUND-SUPPORTED BONDS (a) (dollars in millions)

	2014-15	2015-16	TOTAL
General Obligation Bonds	\$5,192	\$3,328	\$8,520
Lease Revenue Bonds	489	539	1,028
<b>TOTAL GENERAL FUND-SUPPORTED BONDS</b>	<b>\$5,681</b>	<b>\$3,867</b>	<b>\$9,548</b>

(a) Debt issuances not included in Figure 8: Any short-term obligations such as commercial paper, refunding bonds or revenue anticipation notes; revenue bonds issued by State agencies which are repaid from specific revenues outside the General Fund; and "conduit" bonds, such as those issued by State financing authorities on behalf of other governmental or private entities whose obligations secure the bonds.

<sup>1</sup> Figures reflect debt service from only a portion of the bond sales listed in Figure 8. For example, \$2.3 billion of the \$5.2 billion of GO bonds and \$213.0 million of the \$489.0 million of LRBs planned for 2014-15 will be sold during the first half of the fiscal year. These bonds will have interest payments in the second half of the fiscal year. The remaining GO bonds and LRBs to be sold in 2014-15 will not have a debt service payment during the fiscal year. The first interest payment for these bonds will be in 2015-16.

## SECTION 3:

# Measuring Debt Burden

### DEBT RATIOS

Measuring California's debt level with various ratios – while not particularly helpful in assessing debt affordability – does provide a way to compare the State's burden to that of other borrowers. The three most commonly-used ratios are: debt service as a percentage of General Fund revenues; debt as a percentage of personal income; and debt per capita. A fourth ratio – debt as a percentage of state gross domestic product (GDP) – also can be a useful comparison tool.

### DEBT SERVICE AS PERCENTAGE OF GENERAL FUND REVENUES

Because debt service is considered a fixed part of a budget, credit analysts compare General Fund-supported debt service to General Fund revenues to measure a state's fiscal flexibility. California's ratio of debt service to General Fund revenues was 7.13 percent<sup>2</sup> in 2013-14. That figure is based on \$7.3 billion of GO and LRB debt service payments versus \$102.2 billion of General Fund revenues. The STO estimates this ratio will be 7.19 percent<sup>3</sup> in 2014-15. That estimate is based on \$7.7 billion of debt service pay-

ments versus \$107.1 billion of General Fund revenues (as projected by DOF).<sup>4</sup>

### DEBT AS PERCENTAGE OF PERSONAL INCOME

Comparing a state's level of debt to the total personal income of its residents is a way to measure a state's ability to generate revenues and repay its obligations. In its 2014 State Debt Medians report, Moody's lists the State's ratio of net tax-supported debt to personal income at 5.3 percent.<sup>5</sup>

### DEBT PER CAPITA

Debt per capita measures residents' average share of a state's total outstanding debt. It does not account for the employment status, income or other financial resources of residents. As a result, debt per capita does not reflect a state's ability to repay its obligations as well as other ratios, such as debt service as a percentage of General Fund revenues or debt as a percentage of personal income. In its 2014 State Debt Medians report, Moody's lists the State's debt per capita at \$2,465.<sup>6</sup>

<sup>2</sup> Does not reflect offsets due to subsidy payments from the federal government for Build America Bonds (BABs) or transfers from special funds. When debt service is adjusted to account for approximately \$1.4 billion of estimated offsets, the 2013-14 debt service decreases to \$5.9 billion and the ratio of debt service to General Fund revenues drops to 5.79 percent.

<sup>3</sup> Does not reflect offsets due to subsidy payments from the federal government for BABs or transfers from special funds. When debt service is adjusted to account for approximately \$1.5 billion of estimated offsets, the 2014-15 debt service decreases to \$6.2 billion and the ratio of debt service to General Fund revenues drops to 5.81 percent.

<sup>4</sup> Excludes special fund bonds, for which debt service each year is paid from dedicated funds. When the debt service on the ERBs is added to General Fund-supported debt service (excluding offsets due to subsidy payments from the federal government for BABs or transfers from special funds), and the revenue from the quarter-cent sales tax dedicated for payment of the ERBs is added to General Fund revenues, the ratio of debt service to General Fund revenues increases to 7.9 percent in 2013-14 and 7.8 percent in 2014-15.

<sup>5</sup> Moody's calculation of net tax-supported debt includes GO bonds (non self-liquidating), LRBs, ERBs, Proposition 1A bonds, GO commercial paper notes, federal Highway Grant Anticipation Bonds, tobacco securitization bonds with a General Fund backstop, California Judgment Trust Obligations, Bay Area Infrastructure Financing Authority's State payment acceleration notes, various regional center bonds, and State Building Lease Purchase bonds.

<sup>6</sup> The Moody's calculation of net tax-supported debt includes GO bonds (non self-liquidating), LRBs, ERBs, Proposition 1A bonds, GO commercial paper notes, federal Highway Grant Anticipation Bonds, tobacco securitization bonds with a General fund backstop, California Judgment Trust Obligations, Bay Area Infrastructure Financing Authority's State payment acceleration notes, various regional center bonds, and State Building Lease Purchase bonds.

## DEBT AS PERCENTAGE OF STATE GDP

Debt as a percentage of GDP generally is used to measure the financial leverage provided by an issuer's economy. Specifically, this debt ratio compares what an issuer owes versus what it produces. California has the world's 8<sup>th</sup>-largest economy and one of its most diverse.<sup>7</sup> In its 2014 State Debt Medians report, Moody's lists the State's debt-to-GDP ratio at 4.7 percent.<sup>8</sup>

## CALIFORNIA'S DEBT LEVELS COMPARED TO OTHER LARGE STATES

In its State Debt Medians report, Moody's calculates for each state the ratios of debt to personal income, debt per capita and debt as a percentage of GDP and provides the median ratios across all states. It's useful to compare California's debt levels with those of its "peer group" of the 10 most populous states. As shown in Figure 9, the median debt to personal income, debt per capita and debt as a percentage of GDP of these 10 states are, on average, in line with Moody's median for all states combined. California's ratios, however, rank well above the medians for the 10 most populous states.

**FIGURE 9**

DEBT RATIOS OF 10 MOST POPULOUS STATES, RANKED BY RATIO OF DEBT TO PERSONAL INCOME

STATE	MOODY'S/S&P/ FITCH (a)	DEBT TO PERSONAL INCOME (b)	DEBT PER CAPITA (b)	DEBT AS A % OF STATE GDP (b)(c)
Texas	Aaa/AAA/AAA	1.5%	\$614	1.2%
Michigan	Aa2/AA-/AA	2.1%	\$785	1.9%
North Carolina	Aaa/AAA/AAA	2.1%	\$806	1.7%
Florida	Aa1/AAA/AAA	2.5%	\$1,008	2.5%
Pennsylvania	Aa3/AA/AA	2.6%	\$1,172	2.5%
Ohio	Aa1/AA+/AA+	2.7%	\$1,087	2.50%
Georgia	Aaa/AAA/AAA	2.9%	\$1,064	2.5%
California	Aa3/A/A	5.3%	\$2,465	4.7%
Illinois	A3/A-/A-	5.6%	\$2,580	4.8%
New York	Aa1/AA+/AA+	6.0%	\$3,204	5.2%
MOODY'S MEDIAN ALL STATES		2.6%	\$1,054	2.4%
MEDIAN FOR THE 10 MOST POPULOUS STATES		2.7%	\$1,076	2.5%

(a) Moody's, S&P and Fitch ratings as of August 2014.

(b) Figures as reported by Moody's in its 2013 State Debt Medians Report released May 2014. As of end of calendar year 2012.

(c) State GDP numbers have a one-year lag.

<sup>7</sup> California GDP as reported by the U.S. Bureau of Economic Analysis for 2013. Sovereign country ranking and GDP for 2013 as reported by the World Bank.

<sup>8</sup> The Moody's calculation of net tax-supported debt includes GO bonds (non self-liquidating), LRBs, ERBs, Proposition 1A bonds, GO commercial paper notes, federal Highway Grant Anticipation Bonds, tobacco securitization bonds with a General fund backstop, California Judgment Trust Obligations, Bay Area Infrastructure Financing Authority's State payment acceleration notes, various regional center bonds, and State Building Lease Purchase bonds.

## SECTION 4:

# *Analysis of State's Credit Ratings*

The State's current GO bond ratings are "A" from Fitch, "Aa3" from Moody's and "A" from S&P. A summary of the rating agencies' latest actions on the State's GO bonds is presented in Figure 10.

In 2014, Fitch maintained a stable outlook on the State's credit rating while S&P maintained a positive outlook. On June 25, 2014, Moody's upgraded the State's GO credit rating to "Aa3." In its report, Moody's acknowledged the State's improved governance, including four consecutive on-time budgets and a commitment to build a rainy day reserve fund to manage the revenue volatility associated with economic cycles. Moody's also attributed the upgrade to the "state's rapidly improving fiscal position, high but declining debt metrics, adjusted net pension liability ratios that are close to the state median, strong liquidity, and robust economic growth." Moody's said a further upgrade will depend on whether the State makes governance changes to reduce budgetary inflexibility and continues to build and maintain large reserves to protect against revenue downturns. On the other hand, factors that could lower the rating include deterioration of finances and liquidity, significant increases in debt or pension liabilities, and movement away from structurally balanced budgeting.

**FIGURE 10**  
LATEST RATING ACTIONS

RATING AGENCY	ACTION	DATE
Moody's	Affirmed "Aa3" GO rating	September 2014
Fitch	Affirmed "A" GO rating	September 2014
S&P	Affirmed "A" GO rating	September 2014

A summary of the rating agencies' opinion of the State's credit strengths and challenges is presented in Figure 11.

**FIGURE 11**

STATE OF CALIFORNIA GENERAL OBLIGATION RATING AGENCY COMMENTARY

	FITCH	MOODY'S	S&P
RATING STRENGTHS	<ul style="list-style-type: none"> <li>• Institutionalized changes to fiscal management in recent years which have improved its overall fiscal standing</li> <li>• Wealthy, diverse economy</li> <li>• Moderate, but growing, debt burden</li> </ul>	<ul style="list-style-type: none"> <li>• Large, diverse and wealthy economy</li> <li>• Stronger liquidity position in recent years</li> <li>• Significant improvement in budget deficits</li> <li>• Governance improvement leading to on-time budgets</li> </ul>	<ul style="list-style-type: none"> <li>• Deep and diverse economy</li> <li>• Recent commitment to aligning recurring revenues and expenses while paying down budgetary debts</li> <li>• Regular timely enactment of budgets</li> <li>• Moderately high bond debt</li> </ul>
RATING CHALLENGES	<ul style="list-style-type: none"> <li>• Cyclical revenue and cash flows can result in severe budget and liquidity stress</li> <li>• Historical difficulty achieving and sustaining budgetary solutions</li> <li>• Voter initiatives have reduced the State's discretion to effectively manage budgetary challenges over time</li> </ul>	<ul style="list-style-type: none"> <li>• Highly volatile revenue structure</li> <li>• Governance restrictions that make it difficult to respond to revenue volatility</li> <li>• Lack of reserves to cushion the State's finances from downturns</li> <li>• Reliance in past on deficit borrowing and other one-time solutions to resolve budgetary gaps</li> </ul>	<ul style="list-style-type: none"> <li>• Volatile revenue base linked to difficult-to-forecast financial performance</li> <li>• Potential for structural budget balance to erode when tax hike expires in 2018, or sooner if the Legislature and Governor increase ongoing spending</li> <li>• Large retirement benefit and budgetary liabilities</li> </ul>

## APPENDIX A:

# *The State's Debt*

### AUTHORIZED AND OUTSTANDING NON-SELF LIQUIDATING GENERAL OBLIGATION BONDS AS OF JUNE 30, 2014 (DOLLARS IN THOUSANDS)

GENERAL FUND BONDS	VOTER AUTHORIZATION DATE	AUTHORIZATION AMOUNT	LONG TERM BONDS OUTSTANDING	COMMERCIAL PAPER OUTSTANDING (a)	UNISSUED
+ 1988 School Facilities Bond Act	11/08/88	\$797,745	\$44,140	\$ -	\$ -
+ 1990 School Facilities Bond Act	06/05/90	797,875	104,715	-	-
+ 1992 School Facilities Bond Act	11/03/92	898,211	289,605	-	-
California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002	03/05/02	2,600,000	2,181,915	-	259,240
+ California Library Construction and Renovation Bond Act of 1988	11/08/88	72,405	14,010	-	-
*+ California Park and Recreational Facilities Act of 1984	06/05/84	368,900	13,525	-	-
* California Parklands Act of 1980	11/04/80	285,000	2,960	-	-
California Reading and Literacy Improvement and Public Library Construction and Renovation Bond Act of 2000	03/07/00	350,000	278,035	-	5,040
*+ California Safe Drinking Water Bond Law of 1976	06/08/76	172,500	3,150	-	-
* California Safe Drinking Water Bond Law of 1984	11/06/84	75,000	2,030	-	-
* California Safe Drinking Water Bond Law of 1986	11/04/86	100,000	24,215	-	-
California Safe Drinking Water Bond Law of 1988	11/08/88	75,000	29,945	-	-
*+ California Wildlife, Coastal, and Park Land Conservation Act	06/07/88	768,670	124,555	-	-
Children's Hospital Bond Act of 2004	11/02/04	750,000	659,320	-	47,445
Children's Hospital Bond Act of 2008	11/04/08	980,000	541,960	34,510	399,590
Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998 (Hi-Ed)	11/03/98	2,500,000	1,780,210	-	-
Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998 (K-12)	11/03/98	6,700,000	4,223,610	-	11,400
Clean Air and Transportation Improvement Bond Act of 1990	06/05/90	1,990,000	838,975	-	4,985
* Clean Water Bond Law of 1984	11/06/84	325,000	11,255	-	-
* Clean Water and Water Conservation Bond Law of 1978	06/06/78	375,000	4,820	-	-
Clean Water and Water Reclamation Bond Law of 1988	11/08/88	65,000	21,970	-	-

**AUTHORIZED AND OUTSTANDING  
NON-SELF LIQUIDATING GENERAL OBLIGATION BONDS  
AS OF JUNE 30, 2014 (DOLLARS IN THOUSANDS) CONTINUED**

GENERAL FUND BONDS	VOTER AUTHORIZATION DATE	AUTHORIZATION AMOUNT	LONG TERM BONDS OUTSTANDING	COMMERCIAL PAPER OUTSTANDING (a)	UNISSUED
* Community Parklands Act of 1986	06/03/86	100,000	3,135	-	-
* County Correctional Facility Capital Expenditure Bond Act of 1986	06/03/86	495,000	17,535	-	-
County Correctional Facility Capital Expenditure and Youth Facility Bond Act of 1988	11/08/88	500,000	79,935	-	-
Disaster Preparedness and Flood Prevention Bond Act of 2006	11/07/06	4,090,000	2,231,645	-	1,818,652
Earthquake Safety and Public Buildings Rehabilitation Bond Act of 1990	06/05/90	300,000	87,190	2,275	7,490
* Fish and Wildlife Habitat Enhancement Act of 1984	06/05/84	85,000	5,395	-	-
Higher Education Facilities Bond Act of 1988	11/08/88	600,000	26,090	-	-
Higher Education Facilities Bond Act of June 1990	06/05/90	450,000	53,155	-	540
Higher Education Facilities Bond Act of June 1992	06/02/92	900,000	345,350	-	-
Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006	11/07/06	19,925,000	13,248,140	417,000	5,870,290
Housing and Emergency Shelter Trust Fund Act of 2002	11/05/02	2,100,000	940,165	-	132,535
Housing and Emergency Shelter Trust Fund Act of 2006	11/07/06	2,850,000	1,578,620	-	1,208,990
Housing and Homeless Bond Act of 1990	06/05/90	150,000	1,755	-	-
Kindergarten-University Public Education Facilities Bond Act of 2002 (Hi-Ed)	11/05/02	1,650,000	1,444,460	-	-
Kindergarten-University Public Education Facilities Bond Act of 2002 (K-12)	11/05/02	11,400,000	9,361,700	-	57,810
Kindergarten-University Public Education Facilities Bond Act of 2004 (Hi-Ed)	03/02/04	2,300,000	2,058,490	4,045	58,824
Kindergarten-University Public Education Facilities Bond Act of 2004 (K-12)	03/02/04	10,000,000	8,940,730	19,330	143,700
Kindergarten-University Public Education Facilities Bond Act of 2006 (Hi-Ed)	11/07/06	3,087,000	3,003,300	7,100	38,775
Kindergarten-University Public Education Facilities Bond Act of 2006 (K-12)	11/07/06	7,329,000	6,541,895	4,850	702,015
* Lake Tahoe Acquisitions Bond Act	08/02/82	85,000	300	-	-
* New Prison Construction Bond Act of 1986	11/04/86	500,000	3,485	-	-
New Prison Construction Bond Act of 1988	11/08/88	817,000	17,015	-	2,165
New Prison Construction Bond Act of 1990	06/05/90	450,000	22,390	-	605
Passenger Rail and Clean Air Bond Act of 1990	06/05/90	1,000,000	58,800	-	-
Public Education Facilities Bond Act of 1996 (Higher Education)	03/26/96	975,000	544,725	7,515	4,650
++ Public Education Facilities Bond Act of 1996 (K-12)	03/26/96	2,012,035	959,305	-	-
Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act	03/07/00	1,970,000	1,444,740	-	129,346
Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006	11/07/06	5,388,000	2,394,965	-	2,957,710
Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000	03/07/00	2,100,000	1,551,415	-	73,820
Safe, Clean, Reliable Water Supply Act	11/05/96	995,000	578,960	-	89,070
Safe, Reliable High-Speed Passenger Train Bond Act for the 21 <sup>st</sup> Century	11/04/08	9,950,000	623,705	-	9,244,480

**AUTHORIZED AND OUTSTANDING  
NON-SELF LIQUIDATING GENERAL OBLIGATION BONDS  
AS OF JUNE 30, 2014 (DOLLARS IN THOUSANDS) CONTINUED**

GENERAL FUND BONDS	VOTER AUTHORIZATION DATE	AUTHORIZATION AMOUNT	LONG TERM BONDS OUTSTANDING	COMMERCIAL PAPER OUTSTANDING (a)	UNISSUED
* School Building and Earthquake Bond Act of 1974	11/05/74	40,000	15,970	-	-
School Facilities Bond Act of 1990	11/06/90	800,000	165,220	-	-
School Facilities Bond Act of 1992	06/02/92	1,900,000	592,160	-	10,280
Seismic Retrofit Bond Act of 1996	03/26/96	2,000,000	1,217,410	-	-
* State, Urban, and Coastal Park Bond Act of 1976	11/02/76	280,000	4,305	-	-
Stem Cell Research and Cures Bond Act of 2004	11/02/04	3,000,000	1,453,770	79,255	1,409,475
Veterans Homes Bond Act of 2000	03/07/00	50,000	35,205	-	975
Veterans Housing and Homeless Prevention Bond Act of 2014	06/03/14	600,000	-	-	600,000
Voting Modernization Bond Act of 2002	03/05/02	200,000	36,305	-	64,495
Water Conservation Bond Law of 1988	11/08/88	60,000	24,245	-	5,235
* Water Conservation and Water Quality Bond Law of 1986	06/03/86	150,000	34,940	-	13,730
Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002	11/05/02	3,440,000	2,771,185	1,810	404,574
<b>TOTAL GENERAL FUND BONDS</b>		<b>\$128,119,341</b>	<b>\$75,714,125</b>	<b>\$577,690</b>	<b>\$25,777,931</b>

(a) A total of not more than \$1.725 billion of commercial paper principal plus accrued interest may be owing at one time. Bond acts marked with an asterisk (\*) are not legally permitted to utilize commercial paper.

+ SB 1018 (06/27/2012) reduced the voter authorized amount

++ SB 71 (06/27/2013) reduced the voter authorized amount

**AUTHORIZED AND OUTSTANDING  
SELF LIQUIDATING GENERAL OBLIGATION BONDS  
AS OF JUNE 30, 2014 (DOLLARS IN THOUSANDS)**

ENTERPRISE FUND BONDS	VOTER AUTHORIZATION DATE	AUTHORIZATION AMOUNT	LONG TERM BONDS OUTSTANDING	COMMERCIAL PAPER OUTSTANDING (a)	UNISSUED
* California Water Resources Development Bond Act	11/08/60	\$1,750,000	\$241,835	\$ -	\$167,600
Veterans Bond Act of 1986	06/03/86	850,000	31,730	-	-
Veterans Bond Act of 1988	06/07/88	510,000	34,690	-	-
Veterans Bond Act of 1990	11/06/90	400,000	50,475	-	-
Veterans Bond Act of 1996	11/05/96	400,000	142,485	-	-
Veterans Bond Act of 2000	11/07/00	500,000	174,265	-	238,610
+ Veterans Bond Act of 2008	11/04/08	300,000	-	-	300,000
<b>TOTAL ENTERPRISE FUND BONDS</b>		<b>\$4,710,000</b>	<b>\$675,480</b>	<b>\$ -</b>	<b>\$706,210</b>
<b>SPECIAL REVENUE FUND BONDS</b>					
* Economic Recovery Bond Act	04/10/04	15,000,000	4,581,745	-	-
<b>TOTAL SPECIAL REVENUE FUND BONDS</b>		<b>\$ 15,000,000</b>	<b>\$4,581,745</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL SELF LIQUIDATING BONDS</b>		<b>\$19,710,000</b>	<b>\$5,257,225</b>	<b>\$ -</b>	<b>\$706,210</b>

(a) A total of not more than \$1.725 billion of commercial paper principal plus accrued interest may be owing at one time. Bond acts marked with an asterisk (\*) are not legally permitted to utilize commercial paper.

+ AB 639 (10/10/2013) reduced the voter-authorized amount.

**AUTHORIZED AND OUTSTANDING  
LEASE REVENUE BONDS  
AS OF JUNE 30, 2014 (DOLLARS IN THOUSANDS)**

GENERAL FUND SUPPORTED ISSUES	OUTSTANDING	AUTHORIZED BUT UNISSUED
STATE PUBLIC WORKS BOARD		
California Community Colleges	\$311,335,000	\$ -
California Department of Corrections and Rehabilitations	4,254,765,000	2,991,275
The Regents of the University of California	-	21,782
Trustees of the California State University	1,101,890,000	85,523
Various State Facilities (a)	5,229,825,000	996,588
TOTAL STATE PUBLIC WORKS BOARD ISSUES	\$10,897,815,000	\$4,095,168
TOTAL OTHER STATE FACILITIES LEASE-REVENUE ISSUES (b)	\$368,425,000	\$ -
TOTAL GENERAL FUND SUPPORTED ISSUES	\$11,266,240,000	\$4,095,168

(a) This includes projects that are supported by multiple funding sources in addition to the General Fund.

(b) Includes \$88,005,000 Sacramento City Financing Authority Lease-Revenue Refunding Bonds State of California - Cal/EPA Building, 2013 Series A, which are supported by lease rentals from the California Environmental Protection Agency; these rental payments are subject to annual appropriation by the State Legislature.



## APPENDIX B:

# *The State's Debt Service*

**SCHEDULE OF DEBT SERVICE REQUIREMENTS FOR  
SPECIAL REVENUE FUND SELF LIQUIDATING BONDS  
(ECONOMIC RECOVERY BONDS)  
FIXED RATE, AS OF JUNE 30, 2014**

FISCAL YEAR ENDING JUNE 30	CURRENT DEBT		
	INTEREST	PRINCIPAL (a)	TOTAL
2015	\$184,847,398.75	\$525,615,000.00	\$710,462,398.75
2016	157,474,605.00	556,690,000.00	714,164,605.00
2017	140,025,400.00	165,160,000.00	305,185,400.00
2018	132,149,376.25	174,290,000.00	306,439,376.25
2019	113,267,497.50	592,955,000.00	706,222,497.50
2020	86,361,762.50	496,145,000.00	582,506,762.50
2021	61,465,062.50	507,445,000.00	568,910,062.50
2022	36,925,093.75	451,575,000.00	488,500,093.75
2023	12,571,250.00	500,000,000.00	512,571,250.00
2024	35,625.00	1,500,000.00	1,535,625.00
<b>TOTAL</b>	<b>\$925,123,071.25</b>	<b>\$3,971,375,000.00</b>	<b>\$4,896,498,071.25</b>

(a) Includes scheduled mandatory sinking fund payments.

**SCHEDULE OF DEBT SERVICE REQUIREMENTS FOR  
SPECIAL REVENUE FUND SELF LIQUIDATING BONDS  
(ECONOMIC RECOVERY BONDS)  
VARIABLE RATE, AS OF JUNE 30, 2014**

FISCAL YEAR ENDING JUNE 30	CURRENT DEBT		
	INTEREST (a)	PRINCIPAL (b)	TOTAL
2015	\$21,946,438.52	\$ -	\$21,946,438.52
2016	20,022,109.36	-	20,022,109.36
2017	20,022,038.64	-	20,022,038.64
2018	20,022,074.00	25,000,000.00	45,022,074.00
2019	18,522,194.95	115,000,000.00	133,522,194.95
2020	12,631,988.41	189,500,000.00	202,131,988.41
2021	4,842,038.64	128,755,000.00	133,597,038.64
2022	948,515.21	66,305,000.00	67,253,515.21
2023	73,923.55	70,035,000.00	70,108,923.55
2024	15,246.99	15,775,000.00	15,790,246.99
<b>TOTAL</b>	<b>\$119,046,568.27</b>	<b>\$610,370,000.00</b>	<b>\$729,416,568.27</b>

(a) The estimate of future interest payments is based on rate in effect as of June 30, 2014, which is 0.02%. \$500,000,000 of the Series 2009B Economic Recovery Bonds bear interest at fixed rates ranging from 3.50 - 5.00% until reset date, and are assumed to bear interest at the rate of 4.00% from each reset date to maturity.

(b) Includes scheduled mandatory sinking fund payments.

**SCHEDULE OF DEBT SERVICE REQUIREMENTS  
FOR GENERAL FUND NON-SELF LIQUIDATING BONDS  
FIXED RATE, AS OF JUNE 30, 2014**

FISCAL YEAR ENDING JUNE 30	CURRENT DEBT		
	INTEREST (a)	PRINCIPAL (b)	TOTAL (c)
2015	\$3,904,715,760.10	\$2,663,040,000.00	\$6,567,755,760.10
2016	3,785,429,962.60	2,732,275,000.00	6,517,704,962.60
2017	3,665,889,595.62	2,406,125,000.00	6,072,014,595.62
2018	3,554,395,189.95	2,319,805,000.00	5,874,200,189.95
2019	3,438,700,873.12	2,613,020,000.00	6,051,720,873.12
2020	3,291,382,245.14	2,678,110,000.00	5,969,492,245.14
2021	3,168,836,955.23	2,262,835,000.00	5,431,671,955.23
2022	3,047,779,910.31	2,568,985,000.00	5,616,764,910.31
2023	2,925,072,940.53	2,131,395,000.00	5,056,467,940.53
2024	2,822,792,745.43	1,861,655,000.00	4,684,447,745.43
2025	2,726,244,764.40	2,126,025,000.00	4,852,269,764.40
2026	2,617,063,065.35	2,173,850,000.00	4,790,913,065.35
2027	2,504,895,468.31	2,261,200,000.00	4,766,095,468.31
2028	2,393,469,105.86	2,307,775,000.00	4,701,244,105.86
2029	2,282,181,737.60	2,366,455,000.00	4,648,636,737.60
2030	2,161,142,734.31	2,674,785,000.00	4,835,927,734.31
2031	2,016,480,595.61	2,763,270,000.00	4,779,750,595.61
2032	1,885,408,109.40	2,531,100,000.00	4,416,508,109.40
2033	1,749,928,457.51	2,553,560,000.00	4,303,488,457.51
2034	1,621,249,878.50	3,423,455,000.00	5,044,704,878.50
2035	1,385,973,699.85	3,170,320,000.00	4,556,293,699.85
2036	1,195,685,550.76	2,782,530,000.00	3,978,215,550.76
2037	1,021,670,824.37	3,122,660,000.00	4,144,330,824.37
2038	837,618,859.44	3,068,625,000.00	3,906,243,859.44
2039	689,644,728.95	3,415,270,000.00	4,104,914,728.95
2040	413,020,962.50	1,603,885,000.00	2,016,905,962.50
2041	255,309,093.75	2,190,000,000.00	2,445,309,093.75
2042	153,029,093.75	1,319,000,000.00	1,472,029,093.75
2043	97,571,718.75	1,326,325,000.00	1,423,896,718.75
2044	24,002,698.75	875,000,000.00	899,002,698.75
<b>TOTAL</b>	<b>\$61,636,587,325.75</b>	<b>\$72,292,335,000.00</b>	<b>\$133,928,922,325.75</b>

(a) The amounts do not reflect any interest subsidy under the Build America Bonds program. Subsidy not pledged to the repayment of debt service.

(b) Includes scheduled mandatory sinking fund payments.

(c) Does not include outstanding commercial paper.

**SCHEDULE OF DEBT SERVICE REQUIREMENTS  
FOR GENERAL FUND NON-SELF LIQUIDATING BONDS  
VARIABLE RATE, AS OF JUNE 30, 2014**

FISCAL YEAR ENDING JUNE 30	CURRENT DEBT		
	INTEREST (a)(b)	PRINCIPAL (c)	TOTAL (d)
2015	\$23,042,557.82	\$ -	\$23,042,557.82
2016	23,062,936.65	24,400,000.00	47,462,936.65
2017	22,986,429.35	188,275,000.00	211,261,429.35
2018	22,647,470.26	247,005,000.00	269,652,470.26
2019	22,163,639.53	117,320,000.00	139,483,639.53
2020	21,924,649.58	109,500,000.00	131,424,649.58
2021	21,683,515.00	58,600,000.00	80,283,515.00
2022	21,642,113.48	43,600,000.00	65,242,113.48
2023	21,595,004.68	65,600,000.00	87,195,004.68
2024	21,544,289.58	178,300,000.00	199,844,289.58
2025	21,446,176.43	121,300,000.00	142,746,176.43
2026	21,377,568.19	208,400,000.00	229,777,568.19
2027	16,778,065.95	395,900,000.00	412,678,065.95
2028	7,667,544.61	404,500,000.00	412,167,544.61
2029	2,360,242.71	415,600,000.00	417,960,242.71
2030	1,077,135.00	262,590,000.00	263,667,135.00
2031	482,197.89	172,100,000.00	172,582,197.89
2032	339,138.04	225,500,000.00	225,839,138.04
2033	155,435.26	180,700,000.00	180,855,435.26
2034	959.23	1,600,000.00	1,600,959.23
2035	520.00	-	520.00
2036	520.95	-	520.95
2037	519.05	-	519.05
2038	520.00	-	520.00
2039	520.00	-	520.00
2040	476.91	1,000,000.00	1,000,476.91
<b>TOTAL</b>	<b>\$293,980,146.15</b>	<b>\$3,421,790,000.00</b>	<b>\$3,715,770,146.15</b>

(a) The estimate of future interest payments is based on rates in effect as of June 30, 2014. The interest rates for the daily, weekly and monthly rate bonds range from 0.01 - 1.21%. The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, Series 2013A & 2013B currently bear interest at a fixed rate of 4.00% until reset date, and are assumed to bear that rate from reset until maturity.

(b) The amounts do not reflect any interest subsidy under the Build America Bonds program. Subsidy not pledged to the repayment of debt service.

(c) Includes scheduled mandatory sinking fund payments.

(d) Does not include outstanding commercial paper.

**SCHEDULE OF DEBT SERVICE REQUIREMENTS  
FOR ENTERPRISE FUND SELF LIQUIDATING BONDS  
FIXED RATE, AS OF JUNE 30, 2014**

FISCAL YEAR ENDING JUNE 30	CURRENT DEBT		
	INTEREST	PRINCIPAL (a)	TOTAL
2015	\$29,345,470.00	\$56,875,000.00	\$86,220,470.00
2016	26,609,879.13	75,620,000.00	102,229,879.13
2017	23,909,195.00	61,895,000.00	85,804,195.00
2018	21,708,239.65	39,600,000.00	61,308,239.65
2019	20,217,411.16	26,900,000.00	47,117,411.16
2020	18,939,693.75	28,115,000.00	47,054,693.75
2021	17,613,488.75	19,570,000.00	37,183,488.75
2022	16,700,878.78	13,630,000.00	30,330,878.78
2023	16,133,431.25	9,695,000.00	25,828,431.25
2024	15,822,096.25	4,365,000.00	20,187,096.25
2025	15,620,462.30	4,660,000.00	20,280,462.30
2026	15,516,388.75	-	15,516,388.75
2027	15,140,813.65	16,695,000.00	31,835,813.65
2028	14,565,072.80	8,835,000.00	23,400,072.80
2029	13,781,762.80	25,075,000.00	38,856,762.80
2030	12,252,673.69	40,325,000.00	52,577,673.69
2031	10,301,552.28	42,490,000.00	52,791,552.28
2032	8,707,392.50	25,755,000.00	34,462,392.50
2033	7,508,072.50	26,690,000.00	34,198,072.50
2034	6,359,375.00	22,705,000.00	29,064,375.00
2035	5,269,037.50	23,310,000.00	28,579,037.50
2036	4,403,300.00	13,945,000.00	18,348,300.00
2037	3,548,333.75	23,025,000.00	26,573,333.75
2038	2,662,880.00	15,300,000.00	17,962,880.00
2039	1,950,055.00	16,025,000.00	17,975,055.00
2040	1,195,310.00	16,790,000.00	17,985,310.00
2041	404,570.00	17,590,000.00	17,994,570.00
<b>TOTAL</b>	<b>\$346,186,836.24</b>	<b>\$675,480,000.00</b>	<b>\$1,021,666,836.24</b>

(a) Includes scheduled mandatory sinking fund payments.

**SCHEDULE OF DEBT SERVICE REQUIREMENTS  
FOR LEASE-REVENUE DEBT  
FIXED RATE, AS OF JUNE 30, 2014**

FISCAL YEAR ENDING JUNE 30	CURRENT DEBT		
	INTEREST (a)	PRINCIPAL (b)	TOTAL
2015	\$568,898,404.64	\$485,020,000.00	\$1,053,918,404.64
2016	550,542,420.47	514,045,000.00	1,064,587,420.47
2017	525,487,487.69	544,495,000.00	1,069,982,487.69
2018	497,878,246.84	603,130,000.00	1,101,008,246.84
2019	468,654,635.09	580,675,000.00	1,049,329,635.09
2020	439,938,960.73	564,000,000.00	1,003,938,960.73
2021	412,851,357.92	529,685,000.00	942,536,357.92
2022	386,376,887.48	515,280,000.00	901,656,887.48
2023	362,246,119.44	465,650,000.00	827,896,119.44
2024	339,021,763.00	450,625,000.00	789,646,763.00
2025	315,919,797.17	473,945,000.00	789,864,797.17
2026	291,545,167.15	481,685,000.00	773,230,167.15
2027	266,069,646.20	507,130,000.00	773,199,646.20
2028	239,431,999.38	518,050,000.00	757,481,999.38
2029	212,898,449.72	479,375,000.00	692,273,449.72
2030	187,023,864.12	472,130,000.00	659,153,864.12
2031	161,009,881.54	479,580,000.00	640,589,881.54
2032	133,803,191.20	485,965,000.00	619,768,191.20
2033	107,937,648.67	409,690,000.00	517,627,648.67
2034	83,757,561.91	421,075,000.00	504,832,561.91
2035	59,175,658.87	387,655,000.00	446,830,658.87
2036	40,772,850.00	242,565,000.00	283,337,850.00
2037	28,629,262.50	254,705,000.00	283,334,262.50
2038	15,773,937.50	195,975,000.00	211,748,937.50
2039	6,954,287.50	129,320,000.00	136,274,287.50
2040	1,863,587.50	74,790,000.00	76,653,587.50
<b>TOTAL</b>	<b>\$6,704,463,074.23</b>	<b>\$11,266,240,000.00</b>	<b>\$17,970,703,074.23</b>

(a) The amounts do not reflect any interest subsidy under the Build America Bonds program. Subsidy not pledged to the repayment of debt service.

(b) Includes scheduled mandatory sinking fund payments.

**ESTIMATED DEBT SERVICE REQUIREMENTS  
ON INTENDED SALES OF AUTHORIZED BUT UNISSUED BONDS  
DURING FISCAL YEARS 2014-15 AND 2015-16**

FISCAL YEAR ENDING JUNE 30	FY 2014-15 GO SALES DEBT SERVICE	FY 2015-16 GO SALES DEBT SERVICE	FY 2014-15 LRB SALES DEBT SERVICE	FY 2015-16 LRB SALES DEBT SERVICE	TOTAL DEBT SERVICE ALL SALES
2015	\$47,901,000	\$ -	\$4,792,163	\$ -	\$59,698,815
2016	310,342,460	36,708,000	38,025,695	7,005,653	423,493,153
2017	310,340,200	206,649,250	38,026,868	38,416,998	593,430,365
2018	310,342,705	206,648,860	38,034,143	38,414,048	593,441,895
2019	310,337,750	206,652,540	38,025,670	38,416,188	593,432,648
2020	310,338,005	206,654,590	38,025,540	38,416,688	593,434,823
2021	310,345,385	206,649,430	38,026,443	38,419,190	593,440,448
2022	310,341,585	206,646,480	38,026,660	38,411,960	593,426,685
2023	310,338,520	206,649,110	38,029,353	38,418,395	593,435,378
2024	310,342,130	206,650,810	38,027,333	38,411,393	593,431,665
2025	310,337,925	206,649,600	38,028,770	38,414,473	593,430,768
2026	310,341,530	206,653,390	38,026,478	38,415,160	593,436,558
2027	310,337,480	206,654,505	38,023,380	38,416,480	593,431,845
2028	310,340,540	206,650,270	38,031,718	38,421,208	593,443,735
2029	310,339,490	206,652,430	38,028,965	38,411,990	593,432,875
2030	310,342,900	206,652,265	38,027,823	38,411,730	593,434,718
2031	310,343,585	206,650,820	20,155,818	38,412,585	575,562,808
2032	310,344,255	206,648,560	20,155,560	35,968,208	573,116,583
2033	310,341,750	206,650,720	20,157,208	35,963,940	573,113,618
2034	310,342,595	206,651,600	20,159,483	35,968,630	573,122,308
2035	310,337,550	206,650,620	20,160,873	35,964,308	573,113,350
2036	310,341,735	206,651,150	20,155,100	35,968,253	573,116,238
2037	310,344,515	206,651,450	20,160,775	35,967,000	573,123,740
2038	310,344,710	206,649,075	20,161,038	35,967,708	573,122,530
2039	310,340,605	206,650,885	20,159,375	35,971,660	573,122,525
2040	310,344,625	206,648,160	20,159,050	35,965,270	573,117,105
2041	310,343,220	206,651,600	-	35,965,200	552,960,020
2042	310,342,410	206,651,205	-	-	516,993,615
2043	310,342,135	206,651,275	-	-	516,993,410
2044	310,341,580	206,650,415	-	-	516,991,995
2045	310,338,955	223,616,300	-	-	533,955,255
2046	-	206,648,670	-	-	206,648,670
<b>TOTAL</b>	<b>\$9,358,143,830</b>	<b>\$6,253,194,035</b>	<b>\$776,791,275</b>	<b>\$942,904,310</b>	<b>\$17,162,801,468</b>







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